## Remarks:

Claims 1-9, 11-15 and 17 have been examined and stand rejected as not enabled under the standards of 35 U.S.C. § 112, first paragraph. In particular, the Office considers the claims only enabled for uracils, thiouracils and dithiouracils of formula I where  $R^5$  and  $R^8$  are hydrogen, alkyl, alkenyl and alkynyl, optionally containing substituents.

Applicant thanks the Examiner for his time during the telephone interview of August 31, 2009, in which he explained which of the groups of substituents in the claims he considered to be allowable under 35 U.S.C. §112, first paragraph. Applicant has amended the claims herein in an attempt to comply with the Examiner's suggestions in order to advance prosecution at this stage and requests reconsideration of the application as amended.

Applicant reserves the right to continue prosecution of the canceled subject matter in a later-filed continuing application. The examined claims are directed to a chemical synthetic process where an iso (thio) cyanate (X¹=C=N—R) is reacted with an enamine of formula III

The  $R^5$  and  $R^6$  substituents are not involved in the claimed reaction and are a distance from it. Applicant submits that the identity of the  $R^5$  and  $R^6$  substituents, within the definition of claim 1, will not affect the chemistry of the claimed process. Applicant has described how to make the uracil/thiouracil compounds, as the Office concedes, and has done so for all of the compounds of formula I as claimed (see specification, page 12 and pages 14-15). The person of skill in the art has been given a great deal of guidance in terms of parameters that enable

the reaction to proceed efficiently in the description beginning on page 15 of the specification, including how to make the reactants. A person of skill, therefore, is enabled to make the compounds of formula I within the parameters of the claims without undue experimentation.

With respect to unpredictability in the art, the Office has cited the preface to a book, which emphasizes the nature of research chemists' art. First of all, a research chemist, designing a new synthetic scheme, would not have a patent specification with details on an already optimized process, so the "unexpected difficulties" referred to by the Office here are not relevant here. Second, the cited material highlights the high degree of experimentation that is considered routine in this art. The amount of work necessary to practice the present claims falls well within the routine and therefore is not "undue."

Working examples have been provided here which show the reaction of the iso (thio) cyanate and enamine groups. The Office has presented no evidence whatsoever that changing the  $R^5$  and  $R^6$  groups, far from the site of reaction, would have any meaningful effect on how this chemistry proceeds. Nor has the Office presented any substantiated reason for stating that the compounds of formula I could not be made using only routine methods in the art of chemistry. The Office seems to be requiring a working example for each  $R^5$  and  $R^6$  group in the claim; this, however, is not the standard. Applicant submits that the working examples provided here are more than sufficient to enable a skilled chemist to perform the reaction of an iso (thio) cyanate with distant R groups, without having to resort to undue experimentation.

The Office states that the —NR $^5$ R $^6$  group is broad. This factor is not relevant to the issue here since those moieties would not substantially affect the chemistry of the claimed reaction.

In summary, Applicant submits that the  $R^5$  and  $R^6$  groups, as defined in claim 1, are not relevant in any substantive and meaningful way to the claimed chemistry process or the ability of a skilled chemist to perform that process in its full scope because the defined groups do not affect the actual reaction being

performed, because the skilled chemist is accustomed to routine experimentation, and because a great deal of guidance concerning the way the reaction should be performed is provided in the specification.

Applicant requests reconsideration of the application and allowance of all claims as amended.

Respectfully submitted,

Bv:

Martha Cassidy

Attorney for Applicants / Registration No. 44,066

ROTHWELL, FIGG, ERNST & MANBECK, p.c.

Suite 800, 1425 K Street, N.W.

Washington, D.C. 20005 Telephone: (202)783-6040

1618011